

**WHAT IS CLAIMED IS:**

1. A write current circuit for a mass media write head, comprising:
  - a head write driver circuit adapted to drive the write head with a write current signal having a positive write edge and a negative write edge; and
  - 5 a further circuit coupled with the head write driver circuit and adapted to selectively provide pulsing signals which define an overshoot amplitude of said positive write edge and said negative write edge of said write current signal.
- 10 2. The write current circuit of Claim 1, wherein said further circuit is a differential current source.
- 15 3. The write current circuit of Claim 2, wherein said differential current source is programmable.
4. The write current circuit of Claim 1, wherein said further circuit is adapted to selectively provide a defined amplitude of each of said overshoot amplitudes.
- 20 5. The write current circuit of Claim 4, wherein said further circuit is programmable for providing differential overshoot amplitudes for said positive write edge and said negative write edge.

6. The write current circuit of Claim 1, wherein said further circuit includes a delay circuit for selectively providing a defined pulse width for each of said overshoots.

5 7. The write current circuit of Claim 6, wherein said delay circuit is programmable for providing differential overshoot pulse widths for said positive write edge and said negative write edge.

10 8. The write current circuit of Claim 1, wherein said further circuit is adapted to selectively provide a defined amplitude of each of said overshoots and includes a delay circuit for providing a defined pulse width for each of said overshoots.

9. The write current circuit of Claim 8, wherein said further circuit and said delay circuit are programmable for providing differential overshoot amplitudes and pulse widths for said positive write edge and said negative write edge.

10. A write driver for an inductive head element in a disk drive system, said driver comprising:

an H-bridge circuit capable of driving a first current through said head element;  
a boost circuit coupled with said H-bridge and operable for delivering a current pulse  
5 during time periods defining a positive edge of said first current and a negative edge of said first current responsive to a control signal, wherein a sum of said first current and said second current provides the write current for said head element; and

said boost circuit is further adapted to selectively vary said positive edge current pulse and said negative edge current pulse.

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11. The write driver of Claim 10, wherein said boost circuit includes a programmable differential current source.

12. The write driver of Claim 10, wherein said boost circuit is further adapted to  
15 selectively provide a defined amplitude for each of said positive edge current pulse and said negative edge current pulse.

13. The write driver of Claim 12, wherein said boost circuit is programmable for  
providing differential amplitudes for said positive edge current pulse and said negative edge  
20 current pulse.

14. The write driver of Claim 10, wherein said boost circuit further includes a delay circuit for selectively providing a defined pulse width for each of said positive edge current pulse and said negative edge current pulse.

5 15. The write driver of Claim 14, wherein said delay circuit is programmable for providing differential pulse widths for said positive edge current pulse and said negative edge current pulse.

10 16. The write driver of Claim 10, wherein said boost circuit is further adapted to selectively provide a defined amplitude for each of said positive edge current pulse and said negative edge current pulse and further includes a delay circuit for selectively providing a defined pulse width for each of said positive edge current pulse and said negative edge current pulse.

15 17. The write driver of Claim 16, wherein said boost circuit and said delay circuit are programmable for providing differential amplitudes and pulse widths for said positive edge current pulse and said negative edge current pulse.

18. A method of providing a write current to an inductive head element in a disk drive system, comprising:

providing current pulses cooperable for defining a positive edge and a negative edge of said write current;

5 differentially varying an amplitude of said positive edge current pulse and said negative edge current pulse for counteracting induced imbalances in said write current.

19. The method of Claim 19 further comprising varying a pulse width of said positive edge current pulse and said negative edge current pulse for further counteracting 10 induced imbalances corresponding to said disk drive system.